



MOJAVE DESERT AIR QUALITY MANAGEMENT DISTRICT

14306 Park Avenue Victorville, CA 92392-2310
760.245.1661 -- 800.635.4617 -- FAX 760.245.2022

PERMIT TO OPERATE

E003381

Operation under this permit must be conducted in compliance with all information included with the initial application, initial permit condition, and conditions contained herein. The equipment must be maintained and kept in good operating condition at all times. This Permit to Operate or copy must be posted on or within 8 meters of equipment. If a copy is posted, the original must be maintained on site, available for inspection at all times.

EXPIRES LAST DAY OF: SEPTEMBER 2024

OWNER OF OPERATOR (Co.#2979)

NASA/JPL
4800 Oak Grove Drive
West Pasadena, CA 91109

EQUIPMENT LOCATION (Fac.#4402)

NASA/JPL
93 Goldstone Road
Fort Irwin, CA 92310

Description:

DIESEL IC ENGINE, EMERGENCY FIRE PUMP - APOLLO SITE consisting of: Year of Manufacturer 2000, stack height of 10' and a stack diameter of 4".

One Detroit Diesel, Diesel fired internal combustion engine Model No. VMFPT6HT L1211H and Serial No. 91B-1059, producing 140 bhp with 6 cylinders at 0 rpm while consuming a maximum of 6.0 gal/hr. This equipment powers a Peerless Fire Pump Model No. 5AEF11H and Serial No. 545326, rated at 1000 gpm.

CONDITIONS:

1. This existing, diesel engine, and any associated air pollution control equipment, shall be installed, operated, and maintained in strict accord with those recommendations of the manufacturer/supplier and/or sound engineering principles, which produce the minimum emissions of contaminants. Unless otherwise noted, this equipment shall also be operated in accordance with all data and specifications submitted with the application for this permit.

[40 CFR 63.6605(a) and (b) and 63.6625(e)]

2. A non-resettable four-digit (9,999) hour timer shall be installed and maintained on this equipment to indicate elapsed engine operating time.

[17 CCR 93115.10(d) and 40 CFR 63.6625(f)]

3. This equipment shall only be fired on diesel fuel that meets the requirements of CARB Diesel Fuel as defined in 17 CCR 93115.4(a)(8), or an alternative fuel that meets the requirements of 17 CCR 93115.5(a)(2-6), pursuant to the Air Toxic Control Measure for Stationary Compression Ignition Engines.

Fee Schedule: 7 (i)

Rating: 1 device

SIC: 9661

SCC: 20200102

Location/UTM(Km):
517E/3906N

This permit does not authorize the emission of air contaminants in excess of those allowed by law, including Division 26 of the Health and Safety Code of the State of California and the Rules and Regulations of the District. This permit cannot be construed as permission to violate existing laws, ordinances, statutes or regulations of this or other governmental agencies. This permit must be renewed by the expiration date above. If billing for renewal fee required by Rule 301(c) is not received by expiration date above, please contact the District.

NASA/JPL
4800 Oak Grove Drive
West Pasadena, CA 91109

By: **COPY**
Brad Poiriez
Air Pollution Control Officer

[17 CCR 93115.5(a)]

4. This equipment shall not operate more than twenty (20) hours per year for testing and maintenance.

[17 CCR 93115.6(b)(3) and 40 CFR 63.6640(f)(ii)]

5. The hour limit indicated in condition 4, above, does not apply to in-use emergency fire pump assemblies that are driven directly by stationary diesel-fueled CI engines and only operated the number of hours necessary to comply with the testing requirements of National Fire Protection Association (NFPA) 25 "Standard for the Inspection, Testing, and Maintenance of Water-Based Fire Protection Systems," 2002 edition, which is incorporated herein by reference.

[17 CCR 93115.3(n)]

6. Facility-wide (includes facility nos. 611 and 4402) emissions shall not exceed 80 tons per year of NO_x, 24 tons per year of VOC, and 18 tons per year of PM₁₀. Facility-wide emissions shall be calculated and recorded, in tons, on a calendar month basis and totaled for each consecutive twelve-month basis. For emergency engines, only emissions generated during testing and maintenance shall apply toward the facility-wide emission limits. These records shall be maintained as current for a minimum of five (5) years, and made available upon District, State and/or Federal request.

[District Rule 221(B)]

7. The owner/operator shall maintain an operations log for this equipment current and on-site (or at a central location) for a minimum of five (5) years, and this log shall be provided to District, State and/or Federal personnel, upon request. The log shall include, at a minimum, the information specified below:

- a. Date of each use and hours of operation with documentation of how many hours are spent for emergency operation, including what classified the operation as emergency, and how many hours are spent for non-emergency operation, including what classified the operation as non-emergency (i.e. testing, maintenance, NFPA testing, etc). [17 CCR 93115.10(f) and 40 CFR 63.6655(f)]; and,
- b. Monthly and calendar year operation in terms of total hours, both emergency and non-emergency use, classified as described in 'a.' above [17 CCR 93115.10(f)]; and,
- c. Monthly fuel use [17 CCR 93115.10(f)]; and,
- d. Documentation of certified fuel use, as required by condition 3 (may use the supplier's certification of sulfur content if it is maintained as part of this log); and,
- e. Maintenance performed on this equipment, inclusive of the management practice requirements of condition 8 below; and,
- f. Records of the occurrence and duration of each malfunction of operation (i.e., process equipment) or the air pollution control and monitoring equipment [40 CFR 63.6640(b) and 63.6655(a)(2)]; and,
- g. Records of all required maintenance performed on the air pollution control and monitoring equipment [40 CFR 63.6655(a)(4)]; and,
- h. Records of actions taken during periods of malfunction to minimize emissions in accordance with condition 1, including corrective actions to restore malfunctioning process and air pollution control and monitoring equipment to its normal or usual manner of operation [40 CFR 63.6655(a)(5)].

8. This engine is subject to the requirements of 40 CFR 63, Subpart ZZZZ, and pursuant to this federal regulation, this engine is required to meet the following compliance requirements by May 3, 2013:

The owner/operator of this equipment shall demonstrate continuous compliance by committing to a maintenance schedule inclusive of the management practice requirements listed below:

- a. Change oil and oil filter every 500 hours of operation or annually, whichever comes first (source has the option to utilize an oil analysis program pursuant to 40 CFR 63.6625(i) in order to extend the specified oil change requirement.);
- b. Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first; and,
- c. Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR 63.6603(a) and 63.6640(a)]

9. If this emergency engine is operating during an emergency and it is not possible to shut down the engine in order to perform the management practice requirements required by condition 8, or shutting down the engine would pose an unacceptable risk, the management practice can be delayed until the emergency is over, or the risk has been abated. The management practice should be performed as soon as practicable after the emergency/risk has ended. Sources must report any failure to perform the management practice on the schedule required and the Federal, State or local law under which the risk was deemed unacceptable.

[40 CFR 63.6603(a)]

10. The owner/operator must minimize the engine's time spent at idle during startup and minimize the engine's startup time to a period

needed for appropriate and safe loading of the engine, not to exceed 30 minutes, after which time the emission standards applicable to all times other than startup apply.
[40 CFR 63.6625(h)]

11. This equipment does not require a regularly scheduled emission compliance test. However, emission compliance testing may be required at the discretion of the District.
[District Rule 204]

12. A facility wide Comprehensive Emission Inventory (CEI) for all emitted criteria and toxic air pollutants must be submitted to the District, in a format approved by the District, upon District request.
[District Rule 107(b), H&S Code 39607 & 44341-44342, and 40 CFR 51, Subpart A]